

THE DEVELOPMENT OF MOTIONS KID'S ATHLETIC VARIATIONS TO IMPROVE CHILDREN'S DOWN SYNDROME FUNDAMENTAL SKILLS

Oleh:

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Abstrak

Pembelajaran gerak dasar anak *Down Syndrome* yang kurang variatif berdampak pada pembelajarankurang menarik dan membosankan. Tujuan penelitian dan pengembangan variasi gerak kid's atletik untuk meningkatkan keterampilan gerak dasar anak *Down Syndrome*. Metode penelitian yang digunakan adalah penelitian dan pengembangan yang diadopsi dari Borg dan Gall. Subjek uji coba kelompok kecil 4 peserta didik dan uji coba kelompok besar 8 peserta didik *Down Syndrome* di SOIna Jawa Timur. Pengumpulan data dilakukan menggunakan kuisioner yang diperoleh dari ahli pembelajaran dan PJOK serta pengamatan pada peserta didik. Tehnik analisis data yang digunakan adalah deskriptif presentase. Hasil uji produk akhir dari keseluruhan penelitian diperoleh rata-rata: hasil pembelajaran 85.85% (baik). Simpulan dari penelitian bahwa produk permainan dapat digunakan serta diterapkan dalam pembelajaran bagi peserta didik *Down Syndrome* SOIna Jawa Timur.

Kata Kunci:Keterampilan Gerak Dasar, *Down Syndrome*

1. INTRODUCTION

The government of Indonesia has facilitated the education special for them as that contained in the (UUD RI No 20 tahun 2003) on System of Education National . It those listed in (Pasal 32), Paragraph (1) which states that education specifically is education for participants of learners who have degree of difficulty in following the process of learning because of abnormalities of physical, emotional, mental, social, and or has the potential intelligence and flair privileged.

According to Tarigan (2000: 40-41) states that the program of education physical for children with disabilities specifically, are divided into three categories, namely (1) the development of fundamental, (2) sports and games, and (3) the fitness and ability of motion. Sport that is suitable for their ad ne of sport that its non- competitive. Sports and games included therein sport games recreation expected able to improve the quality of the physical and emotional participant learners with disabilities specifically.

Physical education is an educational process that pays attention to human physical development activities . Although the development of primary is physical but still berintensi education, development of physical not a goal to be but as a tool to achieve the goal of education. PJOK in SLB is an educational physical are adapted and or modified in order to facilitate the participants of students with disabilities specifically to participate actively in learning. Needs to be emphasized that the participant students who have needs specifically

have the right to the equal in obtaining education and learning at every level of education.

Education physical done by means of physical, ie activity physical are in generally (though not always) done with the tempo is quite high and especially the movements of great dexterity and to te rampilan, which does not need to be too fast, too smooth and perfect or the quality high, that obtained the benefit for children of students. Although the means of education are physical, benefits for children of students includes theoretical study of motion, including the skills of basic and complex and relationships lead behind in the domain of cognitive, affective and psychomotor (Depdiknas, 2007: 23).

To achieve good PJOK learning is not easy, in achieving the goals of PJOK there are many problems that must be faced, especially the educators, because Down Syndrome students are extraordinary children, the teaching must also be extraordinary so that the learning objectives can be achieved optimally.

Hopefully in the future, educational services in following the learning process can be provided properly and accommodated to students with special needs. Because they are also the nation's children who are the hope of their parents, society and the state. And they can also grow and develop into adults who have self-confidence and high self-esteem in devoting themselves to the Indonesian nation in the future. As it is known, the implementation of an international scale sport, namely the Asian Paragames 2018, has been held in Indonesia. As the host, the hope in the future is

that they will be able to be the best again, it could even be that from the many participants who appeared in the championship, one of them was our students.

With the concept as well as the reference in the above, the author wants to create a variety of learning PJOK that more leads on a motion base participant students. Focused on the material motion base that emphasizes the form of learning that is varied and efficient as well as having elements of the character of the participant students Down Syndrome, then one of the study of the most suitable created is a variation kid's athletic. Kid's athletics is a set of games encouraging the diujukan for activity sports the kids. Elements in the kid's athletics among others a mix between running, jumping and throwing more enabling made models of the game that is easy, innovative, fun, and an emphasis on a motion base that is sustainable, especially for the participants of learners with disabilities specifically.

2. RESEARCH METHODS

This developmental research was applied at elementary school level in SD Negeri Lidah Kulon IV / 467 Surabaya in the academic year 2019/2020. Research subjects were 20 fifth grade students. In its application this study used Tiagarajan or 4-D (four-D) development model with the stages of definition, design, development, and dissemination (Hobri, 2010: 1). Data collection instruments using questionnaires, observation sheets, and tests. In addition, the one-group pretest-posttest research design was also used to see the effectiveness of the learning tools made.

From the ten steps of the development research procedure according to Borg and Gall 1983 which states 10 steps that must be taken in Research and Development:

- a. *Research and information collecting*
- b. *Planning*
- c. *Develop preliminary form of product*
- d. *Preliminary field testing*
- e. *Main product revision*
- f. *Main field testing*
- g. *Operation product revision*
- h. *Operational field testing*
- i. *Final product revision*
- j. *Dissemination and implementation*

based on the consideration of the situation, it can be reduced to three main steps:(1) Preliminary study, (2) Planning stage, and (3) Development:

1. Preliminary Study Stage

Phase studies preliminary cover activities as follows :

- a. Study of Literature, which examines the sources are associated with learning PJOK conformity with three aspects (Affective, Cognitive, Psychomotor).

- b. Study Courses, conducted in SLB Surabaya, which became the object of research. In the early stages, data and information were collected. The results of the study preliminary is used as a material consideration in develop Variations Motion Kid's Athletics to Improve Skills Fundamental Children *Down Syndrom*.

2. Planning Stage

Phase planning includes activities as follows:

- a. Reviewing the process of learning (Affective, Cognitive, Psychomotor) PJOK child *Down Syndrome*.
- b. Identify the basic movement abilities of children with *Down Syndrome*.
- c. Looking for variety of learning PJOK were able to improve the skills of motion of elementary children *Down Syndrome* with elements (walk, running, throwing and jumping), fun and make participants more many moves as well as the security of each participant .
- d. Designing a model of the game comes from the variety of motion kid's athletics are safe, varied, enjoyable and efficient as well as in accordance with the abilities and character of children *Down Syndrome*.
- e. Prepare game materials with the principles of being easy to get, simple, cheap, attractive and according to the needs of children with *Down Syndrome*.

3. Development Study Phase

At this stage, the development of variations in kid's athletic learning is divided into three stages, namely:

- a. Stage test the feasibility of product variations in learning kid's athletics, the stage of testing the feasibility of the product is done by way of deployment questionnaire/ questionnaire to Expert Learning and Expert PJOK. After the product validation has been carried out, then the stage I product refinement is carried out.
- b. Stage test the feasibility of the product game for children *Down Syndrome*, held in SOIna East Java .
- c. Phase evaluation, carried out by analysis of perfecting the product phase II. After that, just finalize the product.

3. RESULTS AND DISCUSSIONS

This research was conducted to look into the validity, practicality, and effectiveness of the learning document that have been developed. Learning document were developed using socio-cultural diversity material in the fifth grade. Components of learning document that have been completed were then assessed by the validator for their eligibility. Below is the results of the assessment of learning document that have been carried out.

In the fun post game model itself is divided into 5 posts that have been adjusted to the character

and movement patterns of Down Syndrome students, as well as tools that are easy to get, safety and simple, including:

1. Post (1) A straight road on a lined track, where the tool required is a straight line marker made of black duct tape with a diameter of 10 centimeters and a length of 5 meters.
2. Post (2) Run straight, in a straight running track with a 5 meter long track only using a post marker (small pole) made of sticks with a height of 50 centimeters placed at the beginning and end of the post. In this post there are no obstacles in the hope that a straight run will become part of the locomotor motion that produces a speed.
3. Post (3) Jump frog, where the tool used is a colorful puzzle mat with numbers on it with a size of 30x30 centimeters according to the footsteps of Down Syndrome students.
4. Post (4) Zig zag run, where the tool used for zig zag obstacles is a cone with a height of 30 centimeters and a base diameter of 17 centimeters made of flexible plastic and not easily broken when stepped on or safety when used. The distance between the cones itself is 1 meter as a running obstacle.
5. Post (5) Jump rings and ends with throwing the ball into the basket. The tool used to jump rings is made of colorful elastic hoses 1 meter long and formed a circle. Meanwhile, to throw a ball in the form of a box or basket with a height of 50 centimeters, for the ball itself uses colorful plastic balls measuring 4 centimeters in diameter.

Research and development have resulted in a product in the form of variation of motion kid's athletics are appropriate and effective to improve the movement of basic child Down Syndrome form of game fun post. Where fun post is a game that in the modification of motion kid's athletics (running, jumping, throwing) with adjustment rules IAAF and tools that have been in simplified again. Games fun post adapted to the conditions and characteristics of child Down Syndrome with the level of pleasure and security. The products are expected through the study of variation of motion kid's athletics with the game fun post, can develop aspects of variation learning is effective and efficient, and can improve skills fundamental.

The results of the final product test of the entire study obtained an average: learning outcomes of 85.85% (good). As the study of the theory has been explained that the model of game fun post aims to expand the skills of fundamental, cooperation, concentration, fitness physical and developmental physical participant learners Down Syndrome. Modification tool in the model of the game is easily done by the participant students that were able to accommodate as a whole against the fundamental. It is also in line with the

(Permendikbud No 21 Tahun 2016) concerning Basic and Secondary Education Content Standards on the content of PJOK for SLB which is stated as follows: Basic Education Level (Class I-VI), Competence (Knowing concepts and practicing basic movement patterns and variations of fundamental), space Scope of Materials (Activity physically through the game – fundamental and variation patterns of fundamental locomotor, non locomotor, manipulative).

1. For participant students with Down syndrome, the use of the product game fun post by using the media simple, varied, and the collaboration of many colors can make the participant students more interested and more familiar with the names of the media are presented in the environment around and improve the fundamental skills.
2. For PJOK educators in special schools, fun post games can be used as a variation of learning on athletic material, both in terms of using productive space for learning and improving fundamental skills. Product games fun post is also created as one of the reference for educators to be able to innovate.

4. CONCLUSION

There are the conclusion of this study as follows:

- a. Fun post game products *can* be applied in pjok game learning. This is based on the results of data analysis from PJOK experts obtained an average percentage of 84% and the results of data analysis from learning experts obtained an average percentage of 82.66%
- b. Fun post game products *can* be used for students of *Down Syndrome* SOIna East Java. This is based on the results of analysis of observation data on cognitive, affective and psychomotor aspects in small group tests obtained an average percentage of 91.67% and analysis of large group test data obtained an average percentage of 86.99%.
- c. Factors that make this *fun post* game acceptable to learners are from all aspects, especially in the psychomotor aspect with an average overall achievement rate of 94.03% analysis results.

5. SUGGESTION

The suggestion based on this research are:

- a. For *Down Syndrome learners*, utilization of *fun post game products* using simple media, variety, and collaboration of many colors can make learners more interested and better know the names of media presented in the surrounding environment and improve motion skills.
- b. This fun post game product *is* also made as one of the references for educators to be able to innovate developing skill game products within

the scope of PJOK learning for Down *Syndrome* learners.

- c. For researchers, fun post game *products will be expected* to have further research so that it can be utilized at all levels of education, especially in developing a variety of motion skills models.

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